

ties. The parts of the brain impinged upon and either damaged or destroyed were the visual tract and the fibers of the angular, and, in part, those of the marginal convolution. The second part of the contribution considers a case of aphasia and so-called transcortical sensory aphasia. This case did not come to necropsy, but the clinical findings are given in such detail that one feels constrained to agree with the author that the direct lesion was in the posterior part of the second temporal convolution. It is of particular interest that operations for relief of symptoms had been done in both these cases. (The diagram employed, properly credited to M. Allen Starr, has a familiar look.)

5. *Case of Dipsomania*.—After referring to the close relationship between dipsomania and epilepsy as taught by Kraepelin and Aschaffenburg, the author narrates the history of his patient. This was a man aged thirty-five years, of good parentage. The first attack was at the age of thirteen years. His life was a history of crime and debauchery. The clinical examination showed special changes in the pulse action and in the heart dulness, both superficial and deep. The pulse was irregular in frequency and in rhythm, and usually accelerated about 90 to 100 per minute. The examination of the position of the heart showed increased area of dulness on all sides, particularly towards the left; the increased area of dulness was inconstant, being most marked at 6 o'clock in the afternoon, and least marked at 11 in the forenoon. These conditions lead the author to consider autointoxication as the factor in dipsomania, as well as, he states, in epilepsy.

6. *Investigations of the Brain*.—This lengthy paper is concluded in this number. The effects of lesions in the posterior part of the occipital lobe are considered first in the section! Observation 133 to 135 inclusive are studies on the effect of lesions in the anterior part of the occipital lobe. Each observation is illustrated with two or more photographs. The results are embodied under four headings. (1) Cortical blindness and the projection doctrine. (2) Mind-blindness and the nature of cortical visual disturbance. (3) The mechanism of sight, the disturbance of vision and its restitution. (4) A review and final consideration of the origin of optical perception. The author's conclusions are that the beginning of all vision is the production of the finished optical picture on the retina: the furtherance is the combination of this optical picture with motor, possibly, and also with other sensory conditions, representatives of a lower order in the infra-cortical center; its final ushering into the higher sphere is due to the existence of a combination in the cortex of this lower order with representatives and sensations of other origin (sensory-representatives).

7. *Region of the Eyes*.—This article is by the pupil and assistant of Ed. Hitzig, the author of the previous paper. This paper practically continues the work of Hitzig, and verifies the findings of that investigator. Twenty-one photographs are given in the text and illustrate the positions at which the various lesions were made.

8. *Alienists and Neurologists*.—An abstract of each paper and the discussion in full is here given. A. FEREE WITMER (New York).

ARCHIVES DE NEUROLOGIE

(Vol. 16, 1903, No. 95, November.)

1. A Case of Complete Cure of Blindness (Hemianopsia). S. TCHIRIEN.
2. Installation of a Pavilion of Isolation for Tuberculous Insane at the Asylum of Armstieres. DRS. CHARDON AND RAVIART.
3. Contribution to the Study of Katatonia (Katatonia and Dementia Præcox). DR. A. PARES.

1. *Complete Cure of Hemianopsia*.—The author, in November, 1902, was called to visit a patient of the age of 22, student at Kiev. In summer of 1895 the patient in riding a velocipede sustained a fall and received so severe a shock upon the head that he lost consciousness, and for several days it was necessary to apply ice to his head. Hitherto, he had been one of the first scholars, but thereafter he could not study as before and began to experience pains in the head, principally in the posterior part. In November, 1901, he remarked an evident weakness of vision, which did not long continue. In June, 1902, when looking at himself in a mirror, he found that he did not perceive a complete image of himself and since has experienced a gradual diminution of vision.

Upon consulting specialists, one said there was no remedy, another said it was the *amblyopia* of nicotine, another that it was *acromegaly*, another that there was derangement of the nutrition of the brain and prescribed subcutaneous injections of strychnine in the face and to take internally preparations of iodine and the extract of cerebral hypophysis. "Once more the famous organotherapy," says the author. The weakness of vision increased, the field of vision narrowed, pains in the head and in the left eye became violent. His parents consulted the author. After a study of the case, he says: "My opinion was the following: The contusion of the posterior part of the head and of the cranium as a result of the violent shock, joined to the loss of consciousness, had caused in the patient for some years internal hemorrhagic pachymeningitis in the regions mentioned on the right side.

"There remained, although the flow of blood was reabsorbed, cicatrices between the dura and pia maters. These cicatrices reveal to us the cause of the pains in the head, which manifest themselves from time to time after intense and prolonged intellectual labor.

"The patient after his fall became apathic, his studies soon fatigued him and the visual acuity of the left eye diminished more and more. During last summer, without doubt, as a result of the fatigue of the eyes, caused by the practical labors of the polytechnic institute, there developed in the occipital part of the right hemisphere of the cerebrum a benign tumor (glioma), which swelling within and without exerted a pressure upon the left occipital part of the cerebrum. As a result of this pressure there developed little by little the weakening of the vision, under the form of left hemianopsy, which later extended to the right part.

"I find in my patient only a part of the peripheric visual field in each eye, affected with a considerable diminution of the perception of colors and of visual acuity, particularly in the left eye. This tumor gains little by little the exterior surface of the occipital part of the right hemisphere of the cerebrum, the place where we found the old cicatrice of pia and dura maters.

This is why the patient, who before did not suffer from constant pains in the head, now experienced violent ones; it manifested itself in piercing, acute pains in the left eye and besides prickings in the nape of neck, back, hands. The absence of all paralysis of movement and of all weakening of sensibility, as well as the entire negative result obtained by the ophthalmoscopy of both eyes, further confirmed our opinion. The enfeebled movements of the right side of the body and the absence of the rotulian reflexes (if, moreover, this last phenomenon is not an individual property of the patient) can be explained by the pressure upon the right half of the cerebellum and upon the spinal marrow. In consequence we have established the following *diagnostic*: *Tumor of the occipital part of the right cerebral hemisphere*. What sort of a tumor

is it? The most probable supposition is that it is a benign tumor (glioma?).

"Against the malignant character of the tumor witnesses the anamnesia; against the tuberculous character witnesses in an incontestable manner the system of the lymphatic vessels; there do not appear to be any swellings of the lymphatic glands, those of the neck in particular. *Therapeutic.* Establishing myself upon my diagnostic of neoplasm of the brain, I counseled my patient, as I did in all analogous cases, as well as in cases of pressure of an exudative meningitis upon the ocular motors (in children), to use immediately very strong absorbent remedies. In the end I ordered him mercurial frictions and hot baths. This order at first troubled the relatives of the patient, no doubt because of the bad reputation that mercury enjoys with the public. Incontestably this mistrust of the public is founded upon the opinion of physicians who regard mercurial friction as injurious to the organism.

"They cite ordinarily divers cases of stomatitis and other like facts, in spite of the evident proof that these facts followed the incorrect employment of mercury and the simultaneous employment of preparations of iodine ordered internally by messieurs the syphilodologues themselves. In fine, though, relatives decided to employ the very energetic absorbent remedies which I recommended, the more, as those opposed, after having tried all means except the extract of cerebral hypophysis (!) declared a pessimist prognosis. I commenced by attempting to regulate the activity of the intestines by means of small clysters of glycerine and of the solution of (*chlorure*) chloride of sodium and by means of pills of podophylin; later it appeared that the patient suffered after a chronic constipation, with great dilatation of the rectum and s. romanum (which often occasioned in the morning an entire impossibility of urinating). The use of different mineral salts of high endosmotic equivalent and the massage of the rectum and of the abdomen were recognized as most efficacious. My direction as to absorbent remedies were the following: The patient had every day baths of 35° to 36° C. (20 to 30 minutes), and, an hour or half-hour after the baths, mercurial frictions under the form of Aix-la-Chapelle mercury soap, 6 grammes in the back and the sides. The teeth were cleaned with toothbrush, mouth gargled 7 to 8 times a day with a saturated solution of chlorate of potash. The frictions were given 6 days in succession and the 7th day was a day of rest. The frictions were given by an experienced assistant surgeon. Some analyses of the urine were made from time to time, which demonstrated that the mercury was effectively absorbed. During an entire month of this mercurial cure he manifested no symptom of stomatitis; only at the end of the cure I noticed a slight swelling of the gums. The frictions commenced only the 20th of November and continued until the 30th of December, with intervals of 24 hours every 6 days in the beginning, and every 3 days afterwards. In all 26 frictions were made. During the cure the patient took some preparations of bromide at evening and during his meals white wine mixed with Levico. On the 23d of November Dr. J. H. Hene made an exploration of the patient with the hand perimeter. The author states the result of explorations made then and on the 30th of November and the 7th of December. On the 13th and 21st of November we stated in writing perimetergrammes, which show the successive improvement of the sight. The article has 33 illustrative charts.

"Immediately after the second friction the pains in the head and the left eye disappeared completely and appetite and sleep also improved.' The patient is now (March, 1903) able to see entirely well, has become stronger and all the symptoms of the malady have disappeared. During the month of January the patient took warm baths. In February and in

the beginning of March the patient took once or twice a day Iodipine (25 p. 100), a gramme in a gelatine capsule, to induce complete evacuation of the mercury."

2. *Isolation of Tuberculous Insane at Armentières.*—The necessity of isolating the tuberculous in insane asylums has for a long time been admitted, says the author. The very great frequency of pulmonary tuberculosis in the north of France and at Lille in particular, where it is the cause of one-fourth of the deaths, creates the condition that at A. the number of patients affected is considerable. Last year (1902) 20 per cent. of the deceased patients were tuberculous. We have placed spittoons in all quarters and put up notices: "It is forbidden to spit on the ground." Dr. Charden decided to attempt the isolation of these patients, "sole efficacious measure to arrest the increasing march of this terrible affection, while awaiting the creation of the more and more necessary special sanatoria." Difficulties present themselves. How shall we be able to group in the same quarter patients so different? How decide on a certain number among them? Once grouped, how maintain them there? The asylum has the advantage of 5 pavilions clearly separated. We chose the most favorable quarter. On the right of the central hall is a dormitory of 14 beds for bed patients; there are 2 dormitories of 16 beds, one for quiet patients and the other for turbulent; there are 2 chambers at the end of each dormitory which gives 3 isolation rooms and 3 rooms for attendants. Besides the patients have a large court, planted with trees and flowers, sunny almost all day and oriented to the south and adjoining the kitchen garden of the establishment, beyond which is the open country. We intend to annex a vast gallery under glass for winter use. In the patients' quarters the walls have been painted with oil, so that they may be washed; the floors are constantly paraffined.

Grouping of patients. Some patients protested, but by gentle measures we brought them to accept a situation, for which they are now the first to thank us. They perceive that they have special care and their régime improved and after a month not one complained or demanded a change. Forty-seven patients, the most of them gravely affected, are placed in the pavilion.

To *whom* shall we *confide the surveillance* of our patients? Shall we expose to contamination attendants, perhaps incapable, from their mental stature, of taking necessary precautions? We have some attendants already in their employ who are tuberculous. These are put into the service, which thus benefits them and removes contagion from other quarters. Two other attendants, one of whom is the chief, are not tuberculous; we hope by multiple precautions to keep them from infection. *Precautions:* (1.) A rigorous *disinfection* of all that goes out of the pavilion; (2) to maintain most scrupulous *cleanliness*; (3) to *treat* the patients.

To prevent the dissemination of germs, hygienic spit-boxes are placed everywhere; in the dormitories are used as individual spittoons the simple enameled night vessels, which has the great advantage of being stable and of presenting a large surface which permits the patient in bed to spit easily into his spittoon on the floor. As liquid antiseptic we employ *lysol*, at 2 per cent., which, as Prof. Calmette says: "*Present certain precious advantages.* Composed of crésyl, of potash and of oléine, its antiseptic strength with respect to the tubercle bacillus is quite great, and thanks to the potash it contains, it dissolves the sputa without coagulating them. Its odor is very agreeable as that of crésyl, and its price is scarcely higher." (Société Française du Lysol, 22 Place Vendôme, Paris; 1 fr. 50 per kilog.) This solution of lysol, at 2 per

cent., we put in our spittoons and use for the daily cleaning of the quarter—benches, tables, floors, walls, etc. The linen of the patients is plunged before leaving the pavilion with a 2 per cent. solution of lysol, where it remains some hours, after which it can be handled without danger. It is then rinsed, then boiled apart for at least a quarter of an hour in a lessive (washing) containing 1.37 per cent. of crystals of soda and 1.15 per cent. of soap.

As to the stools of the patients, they are gathered in a solution of chloride of lime, which sufficiently assures disinfection.

Attendants are clothed with a long blouse, easily disinfected in the 2 per cent. solution of lysol. They receive the alimentary régime of the patients. The patients are isolated as *completely* as possible at all times. The workers, sufficiently numerous, are occupied in assisting the attendants. The weekly *baths* are not given in the quarter, but a certain number of the bathrooms are exclusively reserved. The *treatment* consists above all in suralimentation. Unfortunately we cannot give *all* the suralimentation that patients need. They have each day towards 3 o'clock an extra repast of hot milk and bread. They have meat at noon six days out of seven and on four days this meat is roast or broiled. The morning repast is *café au lait*; the evening, vegetables and substantial soup.

We give them medicaments, as indicated by serious considerations; a very continuous cough, for example. All take twice a day cod liver oil, each taking the dose he wishes. The patients are *weighed* each month so as to know the extent of their improvement. We are able to return to their families some of the curable insane, benefited physically and morally and instructed in some notions of hygiene and salubrity, so that their associates will be guarded from contagion.

3. *Katatonie and Dementia Praecox*.—Dr. Paris states that he believes with some of his confrères that katatonie can only be considered as characterizing a phase of a variety of degenerative mental alienation. The first phase, melancholia (at times paranoiac delirium), from the psychose of which katatony would mark the second period, will appear constant, in my opinion, if we are able to go back to all the circumstances of the début, and in that respect we are easily led into error, as we shall see in the cases reported in this article. As to the last phase of the psychose, *dementia*, it is incorrect, in my view, to state that it rapidly succeeds the phase of catatony, properly so called, all observations failing to justify the denomination, "*dementia praecox*," as I shall also attempt to establish. The author furnishes at considerable length five observations. In the first case, a woman of 28 years of age is placed May, 1903, at the asylum of Maréville, being affected with mental troubles analogous to those that had necessitated treatment for a year in an asylum *four years before*. She had at that time attempted suicide. Patient had always shown exaggerated religiosity, scruples, etc. On her arrival in May, 1903, she exhibited ideas of culpability, traces of her old preoccupations, etc. In August, habitual mutism, general stubbornness, automatic, stereotype moving about. The author obtained much information from a person who knew the patient as to her history, the father not disclosing all the facts.

The author says: "Catatony does not appear in this case until a certain time after the return of intellectual troubles, after a long period of preoccupations, of sad ideas and after an intermediary state of mental confusion. (If one, he said, had relied upon the information given by the father, from whom the patient concealed, as much as possible, her first preoccupations, the catatony would have seemed to exist almost from the début.)"

In the next case 16 months elapsed since the début of the malady

before the period of automatic smiles, etc., appear. His comment is: "Here again we find heredity as a predisposing cause (and hysteria), a determinant emotional cause, a phase of melancholic delirium, a transitory period of mental confusion, a phase of catatony, to which succeeds intellectual enfeeblement, tending to dementia."

Of the next case he says: "We find first the habitual causes of melancholia (heredity, alteration of physical health, emotional cause); second, melancholia; third, mental confusion; fourth, catatony; fifth, a remission if not cure?"

In the course of his comments on the next case he says: "My object has been to show by the preceding examples that there is very rarely a phase of melancholia often insidious and long before the phase of catatony; that this phase of melancholia ought to be sought at times with particular care, for it may, *in part, at least*, escape the attention of the entourage of the patient, and it is thus that some alienists make the degenerative psychose, which we are considering, commence with catatony and gives to it but two phases—catatony and dementia." But if the apparition of catatonic symptoms, well characterized, after a first phase of melancholia showed cause to appear as quite close the ultimate phase of degenerative psychose, there are still cases where dementia appears but *very tardily* and they justify it seems to me the substitution of the appellation *degenerative catatonic psychose* for that of *dementia præcox*, to designate this variety of mental alienation by degeneracy. These cases are not perhaps as rare as is generally believed, and it seems to me useful to call attention to them, to solicit publication of them; it is the principal end of this note."

Of the last case that he cites he says: "It is that of a married woman, mother of five children, who has been sequestered or hospitalized twice with more than ten years' interval for the same troubles (catatonic), entered in my charge at end of September, 1899, who is not yet demented, and whom one can at will, so to speak, put into a catatonic state."

He adds at end of observation: "This woman is very evidently affected with degenerative catatonic psychose as the preceding, but with evolution particularly slow, divided by numerous remissions of variable duration. It attests that a phase of very long chronicity may precede dementia. It does not then seem to me rational to say that katatonia is a syndrome which belongs to the history of dementia præcox, or to quality as *præcox*, the dementia which succeeds catatony in the evolution of the degenerative psychose, of which I have reported some examples; it seems to me also quite logical to distinguish it simply by the name—*degenerative catatonic psychose*, which keeps account of the principal stages of the malady."

Dr. J. M. Charcot.—This number contains an account of the "Inauguration of a Monument at Lamalou" to this great physician, who died some ten years ago. It also contains a vignette portrait by Paul Richer.

Hospitals for insane—young women nurses.—There is an interesting report by D. G. Deny as to the hospital at Meerenberg, near the village of Harlem, in Holland. The director is Dr. Van Deventer.

Among other things, it is stated that the treatment of those with acute psychoses and in states of agitation is usually *alitement* (putting in bed) and prolonged baths.

For chronic insane, *work* remains the principle if not the sole means of treatment. More than 60 per cent. of the patients are occupied. There are halls for broom-making, basket-making, pasteboard work, tailoring, etc. There is a school for idiots. For means of amusement there is a park,

and they have concerts, theatrical soirées and the use of a library of 4,000 volumes and numerous journals and reviews. There are 200 women nurses and 40 male nurses to care for 1,379 patients. There is a school for nurses initiated by Dr. Van Deventer, assisted by Mme Van Deventer, comprising a three-years' course, terminating by an examination, which gives the right to a diploma.

Women nurses for men.—"Convinced moreover that women possess to a degree much more developed than men the qualities necessary in the care of patients, Dr. V. D. has substituted female for male nurses in the care of men. This substitution commenced ten years ago, has given such satisfactory results that it has little by little become general so that now there are scarcely any but women in the male wards, the male nurses being almost exclusively reserved for domestic labors. Add that to carry out this experiment the director has not deemed it necessary, as some are perhaps inclined to think, to employ only the mature or aged; many of the female nurses that we saw are young, wearing a becoming costume, adorned with insignia of their grade and uniting to the charm of their intelligence that of their person." In conclusion, the author says: "But what is worth special mention is the preponderating roll which they have not feared to reserve for young women in the treatment of the insane. It is a very happy application of the celebrated expressions of Dr. Pinel—considered perhaps a little platonic—that as to an 'insane patient' we help him with *indifference* (without showing any sentimental preference of one to another). In a note the editor says: 'This reform counts in France numerous partisans amongst alienists and the administration does not appear to be hostile to it; we hope then soon to see the experiment made in our country.'"

MR. RICHARDS (Amityville.)

MISCELLANY

MOTOR INNERVATION OF CAPILLARIES. R. H. KAHN and E. STEINACH (Pflüger's Archiv, June 26, 1903).

Nearly forty years ago, according to E. Steinach and R. H. Kahn, Stricker established the fact that the finest ramifications of the vascular system are not of a constant diameter but are capable of varying their lumen, not as the result of changes in the blood pressure but as the result of vital changes in their walls. These variations were attributed by Golubew not to a true contractility of the capillary wall, but to the presence or absence of tumefaction of the spindle-cells of the endothelium, the size of the lumen diminishing with the increase in thickness of the capillary wall as the result of this tumefaction. On the other hand, Rouget, and, later, Mayer discovered in the capillary wall many oval spider-like cells which they considered as closely related to the smooth-muscle cells of the arterioles and larger vessels, and to whose contraction they attributed the narrowing of the capillary lumen. In view of these two diametrically opposed hypotheses of the origin of the narrowing of the capillary lumen, Steinach and Kahn were led to investigate whether or not this phenomenon is the expression of a genuine contractility of the capillaries, of the same nature as that possessed by the larger vessels. The results of their researches answered this question in the affirmative. They studied the nictitating and peri-esophageal membranes of the frog and the omentum of kittens and guinea-pigs, and found that when these structures were stimulated by induced electrical shocks, the capillaries, observed under the microscope, responded by means of distinct contractions. There was a diminution not only of the lumen but also of the entire cross-section of the capillary. With maximal stimuli this con-